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**Notice of Allowability**

Application No.

10/826,576

Examiner

Ramesh B. Patel

Applicant(s)

GLANZER ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/28/2005 & 5/2/2005.
2. ☒ The allowed claim(s) is/are 1-56.
3. ☒ The drawings filed on 16 April 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 5/2/2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-56 are allowed.

#### **Information Disclosure Statement**

2. The information disclosure statement (IDS) submitted on 5/2/2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement considered by the examiner.

3. The following is an examiner's statement of reasons for allowance: the prior art of the record teaches a system and a method having process control network, functional elements within a process loops for providing smooth transition from one process loop elements to another process loop elements; however, the prior art of the record particularly fails to teach or fairly suggest in combination with the other elements and features of the claimed invention regarding claims 1-29, an apparatus for operating in a block-oriented safety related open control system comprising: a processor executes the safety related component based on a system schedule and a medium attachment unit, which translates input messages and output messages between the processor and a transmission medium using an extended safety-related protocol; regarding to claims 30-35, a system and an apparatus for permitting interoperability between safety and non-safety related devices in a block-oriented open control system comprising: at least one safety related device including an safety-related resource block and an safety-related

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function block which uniquely identifies a safety-related resource provided in the safety related device and the safety-related function block processes parameters associated with the safety-related resource to produce an output message; and a medium attachment unit translates an input message from a transmission medium to the safety-related function block and the output message from the safety-related function block to the transmission medium using an extended safety-related protocol; regarding claims 36-40, an apparatus operating in a block-oriented open control system which includes safety related components comprising: the safety-related function block includes end-user configured parameters and an end-user configured algorithm; a physical layer, which translates messages from a transmission medium into a suitable format for the user layer and from the user layer into a signal for transmission on the transmission medium using an extended safety-related protocol; regarding claim 41-42, a memory for storing data for access by an application framework operating in a device within a block-oriented open control system with safety related components which comprising: a data structure including a safety-related function block; a safety-related resource block, which makes hardware specific characteristics of the device electronically readable and at least one safety-related transducer block, wherein the at least one transducer block controls access to the safety-related function block and regarding claims 43-56, a process for communicating safety related data from a publisher to a subscriber over an open control system, comprising: generating a first authenticator for the first data sequence; generating a second data sequence, wherein the second data sequence includes the safety related data and the first authenticator; communicating the second

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data sequence from the publisher to the subscriber; receiving a second prime data sequence which includes a received authenticator and received data; wherein the content of the second prime data sequence may vary from the content of the second data sequence; generating a third data sequence at the subscriber using at least one sequence of data obtained from the second prime data sequence; calculating a second authenticator at the subscriber based upon the third data sequence; comparing the second authenticator to the received authenticator; rejecting the second prime data sequence from further processing when the received authenticator and the second authenticator are different; and accepting the second prime data sequence when the received authenticator and the second authenticator are the same.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh B. Patel whose telephone number is 571-272-3688. The examiner can normally be reached on M-Th; 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ramesh B. Patel  
Primary Examiner 6/25/05  
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